

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,584	09/29/2004	Laurie A. Castonguay	21085YP	2541
210 7590 04/03/2007 MERCK AND CO., INC		EXAMINER		
P O BOX 200	0		COVINGTON, RAYMOND K	
RAHWAY, NJ 07065-0907			ART UNIT	PAPER NUMBER
			1625	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
31 DAYS		. 04/03/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary		Application No.	Applicant(s)			
		10/509,584	CASTONGUAY ET AL.			
		Examiner	Art Unit			
-		Raymond Covington	1625			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status		·				
1) 🛛	Responsive to communication(s) filed on 29	September 2004.				
2a)	This action is FINAL . 2b) The This action is FINAL .	nis action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
4)⊠	4)⊠ Claim(s) <u>1-23</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
6)	Claim(s) is/are rejected.					
7)	_					
8)⊠	8) Claim(s) 1-23 are subject to restriction and/or election requirement.					
Applicati	on Papers					
9) The specification is objected to by the Examiner.						
	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority ι	under 35 U.S.C. § 119	•				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)	a)⊠ Ali b)□ Some * c)□ None of:					
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
	e of References Cited (PTO-892)	4) Interview Summary				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date 3) Information Disclosure Statement(s) (PTO/SB/08) Notice of Informal Patent Application						
	r No(s)/Mail Date	6) Other:				

Art Unit: 1625

Election/Restrictions

The Markush Group set forth in the claims includes both independent and distinct inventions, and patentably distinct compounds (species) within each invention. However, this application discloses and claims a plurality of patentably distinct inventions far too numerous to list individually.

Moreover, each of these inventions contains a plurality of patentably distinct compounds, which are too numerous to List individually. For the reasons

provided below, restriction to one of the following Groups is required under 372

35 USC 121, wherein a Group is a set of patentable distinct inventions of a broad statutory category (e.g. compounds, methods of use, methods of making, etc.):

37 CFR / 499

Restriction to one of the following inventions is required under 35 U.S.C. 121.

- I. Claims 1-16 in part, drawn to nonheterocyclic derivatives of formula I including its salts, and its pharmaceutical compositions, A single disclosed specie is requested for search purposes.
- II. Claims 1-16 in part, drawn to benzofuran derivatives of formula I including its salts, and pharmaceutical compositions, A single disclosed specie is requested for search purposes.

Application/Control Number: 10/509,584

Art Unit: 1625

III. Claims 1-16 in part, drawn to benzopyran derivatives of formula I including its salts, and pharmaceutical compositions, A single disclosed specie is requested for search purposes.

Page 3

- IV. Claims 1-16 in part, drawn to benzodioxane derivatives of formula I including its salts, and pharmaceutical compositions, A single disclosed specie is requested for search purposes.
- V. Claims 1-16 in part, drawn to tetrahydrocarbazole derivatives of formula I including its salts, and pharmaceutical compositions, A single disclosed specie is requested for search purposes.
- VI. Claims 1-16 in part, drawn to compounds of formula I not set forth above including its salts, and pharmaceutical compositions, A single disclosed specie is requested for search purposes.
- VII. Claim 17-22 in part, drawn to methods of mediating disease by

 Cannabinoid-1 receptor using compounds of formula (I) wherein A is

 carbocyclic.
- VIII. Claim 17-22 in part, drawn to methods of mediating disease by

 Cannabinoid-1 receptor using compounds of formula (I) wherein A is
 furanyl or thiophenyl.

Application/Control Number: 10/509,584 Page 4

Art Unit: 1625

IX. Claim 17-22 in part, drawn to methods of mediating disease by

Cannabinoid-1 receptor using compounds of formula (I) wherein A is
pyridinyl.

- X. Claim 17-22 in part, drawn to methods of mediating disease by the
 Cannabinoid-1 receptor using compounds of formula (I) wherein A is thiazoyl.
- XI. Claim 17-22 in part, drawn to methods of mediating disease by theCannabinoid-1 receptor using compounds of formula (I) wherein A is5 member one N heterocyclic containing.
- XII. Claim 17-22 in part, drawn to methods of mediating disease by

 Cannabinoid-1 receptor using compounds of formula (I) wherein A is
 heterocyclic containing.

XIII. Claims 17-22, drawn to methods of treating or psychosis, memory deficit, cognitive disorders, migraine, neuropathy, neuro-inflammatory disorders, cerebral vascular accidents, head trauma, anxiety disorders, stress, epilepsy, Parkinson's disease, schizophrenia, substance abuse disorders, constipation, chronic intestinal pseudo-obstruction, cirrhosis of the liver, asthma, obesity, and other eating disorders associated with excessive food

Art Unit: 1625

intake using compounds of formula (I) wherein A is as set forth in each of Groups I- VI above.

- XIV. Claims 19-22, in part, drawn to methods of treating eating disorders associated with excessive food intake using compounds of formula (I) wherein A is furanyl or thiophenyl.
- XV. Claims 22, in part, drawn to methods of preventing obesity using compounds of formula (I) wherein A is pyridinyl.
- XVI. Claims 17-22, 23 in part, 24 and 30 drawn to methods of treating or preventing diabetes using compounds of formula (I) wherein Ar is thiazoyl.
- XVII. Claims 17-22, 23 in part, and 24-25 drawn to methods of treating or preventing diabetes using compounds of formula (I) wherein Ar is 5 member one N heterocyclic containing.
- XVIII. Claims 17-22, 23 in part, and 24 drawn to methods of treating or preventing diabetes using compounds of formula (I) wherein Ar is heterocyclic containing.

The inventions listed as Groups I -XVIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In these claims, the numerous variables (e.g. A, Y, Z, R1, R2, R3, R4, R6, etc.) and their voluminous complex meanings and their seemingly endless permutations and combinations and the lengthy list of named compounds in claims 15, and 16, along with the numerous methods involved make it virtually impossible to determine the full scope and complete meaning of the claimed subject matter. As presented, the subject matter cannot be regarded as being a clear and concise description for which protection is sought and as such the listed claims do not comply with the requirements of PCT Article 6.

Applicants are required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Composition claim 23 will be searched with the corresponding elected subject matter.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds

Application/Control Number: 10/509,584

Art Unit: 1625

one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Covington whose telephone number is (571) 272-0681. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas McKenzie at telephone number (571) 272-0681.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Application/Control Number: 10/509,584

Art Unit: 1625

Page 9

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas McKenzie

SPE

Art Unit 1625

RKC